#### PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference K12F1393	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2004/012361	International filing date (day/month/year) 27 August 2004 (27.08.2004)	Priority date (day/month/year) 03 September 2003 (03.09.2003)
International Patent Classification (8th See relevant information in Form P	edition unless older edition indicated) PCT/ISA/237	
Applicant NAKAMURA, Toshikazu		

1.	This international preliminary re International Searching Authorit	port on patentability (Chapte y under Rule 44 bis. 1(a).	r I) is issued by the International Bureau on behalf of the		
2.	This REPORT consists of a total	of 5 sheets, including this co	over sheet.		
	In the attached sheets, any refere to the international preliminary r	ence to the written opinion of report on patentability (Chapt	the International Searching Authority should be read as a reference er I) instead.		
3.	This report contains indications	relating to the following item	s:		
	Box No. I	Basis of the report			
	Box No. II	Priority			
	Box No. III	Non-establishment of opin applicability	ion with regard to novelty, inventive step and industrial		
	Box No. IV	Lack of unity of invention			
	Box No. V	Reasoned statement under applicability; citations and	Article 35(2) with regard to novelty, inventive step or industrial explanations supporting such statement		
	Box No. VI	Certain documents cited			
	Box No. VII Certain defects in the international application				
	Box No. VIII	Certain observations on the	e international application		
4.	The International Bureau will conot, except where the applicant n date (Rule 44bis .2).	mmunicate this report to desi nakes an express request unde	gnated Offices in accordance with Rules 44 <i>bis</i> .3(c) and 93 <i>bis</i> .1 but er Article 23(2), before the expiration of 30 months from the priority		
			Date of issuance of this report 26 June 2006 (26.06.2006)		
	The International Burea		Authorized officer		
	34, chemin des Colo		Masashi Honda		

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Facsimile No. +41 22 338 82 70 Form PCT/IB/373 (January 2004)

1211 Geneva 20, Switzerland

#### PATENT COOPERATION TREATY

From the		NAL SEARCHI	NG AUTHOR	RITY		"ANS.
То:		·				PCT PCT
						~/
						RITTEN OPINION OF THE TIONAL SEARCHING AUTHORITY
						(PCT Rule 43bis.1)
					Date of mailing (day/month/year)	
Applic	ant's or a	gent's file referen	ice		FOR FURTHER	ACTION
	2F13					See paragraph 2 below
	-	plication No. 2004/012	261	International filing date 27.08.2004	(day/month/year)	Priority date (day/month/year)
						03.09.2003
Interna	tional Pa	tent Classification	n (IPC) or both	national classification an	d IPC	·
Applic	ant					
٠.		RA, Tosh	ikazu			
		·				
	701.		1 1			
I.	Thus o		ndications reiai	ting to the following items	<b>5:</b>	
		Box No. I	Basis of the	opinion		
		Box No. II	Priority			
	M	Box No. III	Non-establis	shment of opinion with reg	gard to novelty, inventi	ve step and industrial applicability
	닐	Box No. IV	Lack of unit	y of invention		
		Box No. V		atement under Rule 43bis. ; citations and explanation		ovelty, inventive step or industrial ement
		Box No. VI	Certain docu	ments cited		
		Box No. VII	Certain defe	cts in the international app	olication	
	Ш	Box No. VIII	Certain obse	rvations on the internation	al application	
2.	FURT	HER ACTION				
	Internation than the	ntional Preliminar nis one to be the	ry Examining A IPEA and the	Authority ("IPEA") excep	t that this does not app the International Bure	be considered to be a written opinion of the ly where the applicant chooses an Authority other can under Rule 66.1 <i>bis</i> (b) that written opinions of
ı	If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of For PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.					of 3 months from the date of mailing of Form
		rther options, see	-	•	orny date, winesiever	Aprico fact.
3.	For fu	rther details, see r	notes to Form I	PCT/ISA/220.		
Name a	nd maili	ng address of the	ISA/JP		Authorized officer	
Cassim	I. NI.				LT 1 N	

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/012361

Вох	x No. I	Basis of this opinion
1.	With filed	n regard to the language, this opinion has been established on the basis of the international application in the language in which it was , unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language  which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2.		regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed nation, this opinion has been established on the basis of:
	a.	type of material
		a sequence listing
	ا	table(s) related to the sequence listing
	b.	format of material
	1	in written format
		in computer readable form
	c.	time of filing/furnishing
l		contained in the international application as filed.
I	ļ	filed together with the international application in computer readable form.
	l	furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Addi	tional comments:
		·
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# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/012361

Box No. I	III Non-establishment of opin	nion with regard to novelty, inventive step and industrial applicability
	stions whether the claimed invention e have not been examined in respect of:	appears to be novel, to involve an inventive step (to be non obvious), or to be industrially f:
	the entire international application	·
$\boxtimes$	claims Nos. 9-16. 27	
becaus	ise:	· · · · · · · · · · · · · · · · · · ·
$\boxtimes$	the said international application, or trelate to the following subject matter	the said claims Nos. 9-16, 27 r which does not require an international preliminary examination (specify):
	thus relate to a subject for	te to methods for treatment of the human body by therapy and or which the International Examining Authority is not required a search, in compliance with PCT Article 17 (2)(a)(i) and PCT
	the description, claims or drawings (in are so unclear that no meaningful opin	indicate particular elements below) or said claims Nos. inion could be formed ( <i>specify</i> ):
	the claims, or said claims Nos.	are so inadequately supported
	by the description that no meaningful	
$\boxtimes$	no international search report has bee	en established for said claims Nos. 9-16, 27
	the nucleotide and/or amino acid sequ Instructions in that:	quence listing does not comply with the standard provided for in Annex C of the Administrative
	the written form	has not been furnished
	the computer readable form	does not comply with the standard  has not been furnished  does not comply with the standard
		and/or amino acid sequence listing, if in computer readable form only, do not comply with the n Annex C-bis of the Administrative Instructions.
	See Supplemental Box for further deta	ails.

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP,200.4/012361

1.	Statement						
Novelty (N)	Novelty (N)	Claims			26.		YI
		Claims	1-8,	17-26	No. of the second	PELIA.	_ N
Inventive step (IS)	Claims					Y	
	Claims	1-8,	17-26			_ N	
	Industrial applicability (IA)	Claims	1-8,	17-26			Y
		Claims					 N

#### 2. Citations and explanations:

Document 1: US 5821223 A (The United States of America as represented by the

Department of Health and Human Services) 13 October 1995

Document 2: Toyoda, M. et al, FEBS Letter, 2001, Vol. 509, pp.95-100,

#### Claims 1-8 and 17-26

The inventions of claims 1-8 and 17-26 do not appear to possess novelty or involve an inventive step based on documents 1 and 2 cited in the ISR.

Document 1 describes human recombinant PLGF, namely, human recombinant HGF having five amino acid residues deleted in the first Kringle domain, having growth promotion action on epithelial cells and the like and effective in the treatment of damaged epithelial cells; the invention of the present application and the invention described in document 1 cannot be differentiated.

In addition, as described in document 2, because HGF is known to have vascularization promotion action and granulation promotion action, investigating whether the protein of the invention of the present application having amino acid sequence resembling HGF has this action could be easily achieved by a person skilled in the art.